

City of Raleigh
Engineering
Services
Department



Stormwater Management



Lake Dam Road Bridge
Replacement Update

Feb. 8, 2018

Project History



- 1966: The 3-span bridge (supported over three slabs/gaps) was built and made of timber and pre-stressed concrete beams.
- March 2012: North Carolina Department of Transportation (NCDOT) determined that the beams for the bridge were deteriorating.
- July 2013: The City hired a structural engineer firm to look into the condition of the bridge.
- March 2014: Following a regular inspection, the bridge was closed to all traffic due to safety concerns. The City began exploring options to repair the bridge and reopen the street to traffic.

Project History Continued



- January 2015: The City exhausted repair options for the existing bridge and proceeded to begin planning its replacement.
- May/Sept. 2015: The City and NCDOT entered a municipal agreement with 80 percent funding from the FHWA and 20 percent from the City for construction costs only.
- January 2016: Raleigh City Council approved an on-call contract and master agreement with Dewberry. This project was the third agreement executed under the master agreement.
- April 2016: Dewberry received a notice-to-proceed from the City to start the final design.

Project Status – Design



Design Elements	Status
Final Design (21 months)*	Complete
Environmental Permits (12 months)*&**	Complete
Easement Acquisition (11 months)	Complete
City Plan Review (3 months)	Complete
NCDOT Plan Review (21 months)**	Complete
Private Utility Coordination	Complete

*Coordination with the State, US Army Corps of Engineers, and Department of the Interior National Park Service.

**Coordination with NCDOT and FHWA.

Project Status – Construction



Construction Elements	Status
Tree clearing for utility relocations	Complete
Received authorization from NCDOT and FHWA to bid the project for construction	Feb. 2, 2018
Advertise the construction bid for the project (upon approval from NCDOT)	Feb. 9, 2018
Construction bid proposals due	March 2018
NCDOT & FHWA approval of the lowest responsible bid	March – May 2018
Power, cable & phone relocations	April – June 2018
Construction contract awarded	June/July 2018
Begin construction	July/August 2018
Gas, water & sewer relocations	During Construction
Bridge reopens	February/March 2019

Project Challenges



Bridge replacements typically begin before a bridge is considered unsafe. However, deterioration of the structure occurred quicker than expected.

The plan review process with NCDOT took longer than expected.

Preparing for and receiving necessary environmental permits took 12 months.

Easement requirements with Department of the Interior National Park Service impacted the original easement plan causing the City to realign utility relocations.

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Streamlining the Project



The City chose to entirely fund the cost of the bridge design in the amount of \$285,000 to move the project forward.

The City initiated easement acquisitions for private utility relocation earlier than usual after anticipating time needed to complete this step. This impacted funding reimbursement provided by FHWA.

The City shortened the construction timeframe and approved work to be done on weekends.

Questions?



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